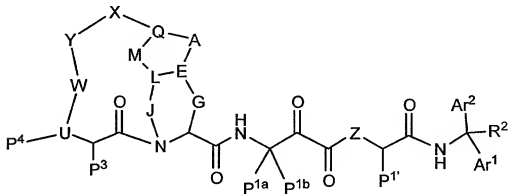


WHAT IS CLAIMED IS:

1. A compound, including enantiomers, stereoisomers, rotomers and
tautomers of said compound, and pharmaceutically acceptable salts,
5 solvates or derivatives thereof, with said compound having the general
structure shown in Formula I:



Formula 1

- 10 wherein:

X and Y are independently selected from the moieties: alkyl, alkyl-aryl, heteroalkyl, heteroaryl, aryl-heteroaryl, alkyl-heteroaryl, cycloalkyl, alkyl ether, alkyl-aryl ether, aryl ether, alkyl amino, aryl amino, alkyl-aryl amino, alkyl thio, alkyl-aryl thio, aryl thio, alkyl sulfone, alkyl-aryl sulfone, aryl sulfone, alkyl-alkyl sulfoxide, alkyl-aryl sulfoxide, alkyl amide, alkyl-aryl amide, aryl amide, alkyl sulfonamide, alkyl-aryl sulfonamide, aryl sulfonamide, alkyl urea, alkyl-aryl urea, aryl urea, alkyl carbamate, alkyl-aryl carbamate, aryl carbamate, alkyl-hydrazide, alkyl-aryl hydrazide, alkyl hydroxamide, alkyl-aryl hydroxamide, alkyl sulfonyl, aryl sulfonyl,

- 20 heteroalkyl sulfonyl, heteroaryl sulfonyl, alkyl carbonyl, aryl carbonyl, heteroalkyl carbonyl, heteroaryl carbonyl, alkoxy carbonyl, aryloxy carbonyl, heteroaryloxy carbonyl, alkylaminocarbonyl, arylaminocarbonyl, heteroarylaminocarbonyl or a combination thereof, with the proviso that X and Y may optionally be additionally substituted with X¹¹ or X¹²:

X^{11} is alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkyl-alkyl, heterocyclyl, heterocyclalkyl, aryl, alkylaryl, arylalkyl, heteroaryl, alkylheteroaryl, or heteroarylalkyl, with the proviso that X^{11} may be additionally optionally substituted with X^{12} ;

- 5 X^{12} is hydroxy, alkoxy, aryloxy, thio, alkylthio, arylthio, amino, alkylamino, arylamino, alkylsulfonyl, arylsulfonyl, alkylsulfonamido, arylsulfonamido, carboxy, carbalkoxy, carboxamido, alkoxycarbonylamino, alkoxycarbonyloxy, alkylureido, arylureido, halogen, cyano, or nitro, with the proviso that said alkyl, alkoxy, and aryl may be additionally optionally substituted with moieties independently selected from X^{12} ;

W may be present or absent, and if W is present, W is selected from C=O, C=S, or SO₂;

- Q may be present or absent, and when Q is present, Q is CH, N, P, (CH₂)_p, (CHR)_p, (CRR')_p, O, RNR, S, or SO₂; and when Q is absent, M is also absent, A is directly linked to X;

A is O, CH₂, (CHR)_p, (CHR-CHR')_p, (CRR')_p, NR, S, SO₂ or a bond;

U is selected from O, N, or CH;

E is CH, N or CR, or a double bond towards A, L or G;

- G may be present or absent, and when G is present, G is (CH₂)_p, (CHR)_p, or (CRR')_p; and when G is absent, J is present and E is directly connected to the carbon atom where G was connected to;

J may be absent or present, and when J is present, J is (CH₂)_p, (CHR)_p, or (CRR')_p, SO₂, NH, NR or O; and when J is absent, G is present and L is directly linked to nitrogen;

- 25 L may be present or absent, and when L is present, L is CH, CR, O, S or NR; and when L is absent, then M may be absent or present, and if M is present with L being absent, then M is directly and independently linked to E, and J is directly and independently linked to E;

- M may be present or absent, and when M is present, M is O, NR, S, SO₂, (CH₂)_p, (CHR)_p, (CHR-CHR')_p, or (CRR')_p;

p is a number from 0 to 6;

- R and R' are independently selected from the group consisting of H; C1-C10 alkyl; C2-C10 alkenyl; C3- C8 cycloalkyl; C3-C8 heterocycloalkyl, alkoxy, aryloxy, alkylthio, arylthio, amino, amido, cyano, nitro; (cycloalkyl)-alkyl and (heterocycloalkyl)alkyl, wherein said cycloalkyl is made of three to eight carbon atoms, and zero to six oxygen, nitrogen, sulfur, or phosphorus atoms, and said alkyl is of one to six carbon atoms; aryl; heteroaryl; alkyl-aryl; and alkyl-heteroaryl; with said alkyl, heteroalkyl, alkenyl, heteroalkenyl, aryl, heteroaryl, cycloalkyl and heterocycloalkyl moieties may be optionally substituted, with said term "substituted" referring to optional and suitable substitution with one or more moieties selected from the group consisting of alkyl, alkenyl, alkynyl, aryl, aralkyl, cycloalkyl, heterocyclic, halogen, hydroxy, thio, alkoxy, aryloxy, alkylthio, arylthio, amino, amido, cyano, nitro, sulfonamido; and
- 15 P^{1a}, P^{1b}, P^{1'} and P³ are independently selected from: H, C1-C10 straight or branched chain alkyl, C2-C10 straight or branched chain alkenyl, and C3-C8 cycloalkyl, C3-C8 heterocyclic; (cycloalkyl)alkyl or (heterocycl)alkyl , wherein said cycloalkyl is made up of 3 to 8 carbon atoms, and zero to 6 oxygen, nitrogen, sulfur, or phosphorus atoms, and
- 20 said alkyl is of 1 to 6 carbon atoms; aryl, heteroaryl, arylalkyl, or heteroarylalkyl, wherein said alkyl is of 1 to 6 carbon atoms; wherein said alkyl, alkenyl, cycloalkyl, heterocyclyl; (cycloalkyl)alkyl and (heterocycl)alkyl moieties may be optionally substituted with R", and
- 25 further wherein said P^{1a} and P^{1b} may optionally be joined to each other to form a spirocyclic or spiroheterocyclic ring, with said spirocyclic or spiroheterocyclic ring containing zero to six oxygen, nitrogen, sulfur, or phosphorus atoms, and may be additionally optionally substituted with R"; R" is hydroxy, alkoxy, aryloxy, thio, alkylthio, arylthio, amino, alkylamino, arylamino, alkylsulfonyl, arylsulfonyl, alkylsulfonamido, arylsulfonamido,
- 30

carboxy, carbalkoxy, carboxamido, alkoxycarbonylamino, alkoxycarbonyloxy, alkylureido, arylureido, halogen, cyano, or nitro moiety, with the proviso that the alkyl, alkoxy, and aryl may be additionally optionally substituted with moieties independently selected from R^m;

- 5 Z is O, NH or NR^m;

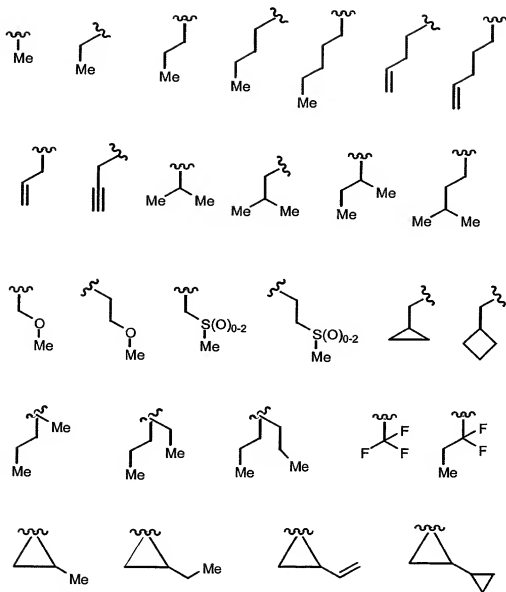
R^m is alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkyl-alkyl, heterocyclidyl, heterocyclidylalkyl, aryl, alkylaryl, arylalkyl, heteroaryl, alkylheteroaryl, or heteroarylalkyl moiety, with the proviso that R^m may be additionally optionally substituted with Rⁿ;

- 10 Ar¹ and Ar² are independently selected from phenyl; 2-pyridyl, 3-pyridyl, 4-pyridyl or their corresponding N-oxides; 2-thiophenyl; 3-thiophenyl; 2-furanyl; 3-furanyl; 2-pyrrolyl; 3-pyrrolyl; 2-imidazolyl; 3(4)-imidazolyl; 3-(1,2,4-triazolyl); 5-tetrazolyl; 2-thiazolyl; 4-thiazolyl; 2-oxazolyl; or 4-oxazolyl; either or both of which may be optionally substituted with R¹;

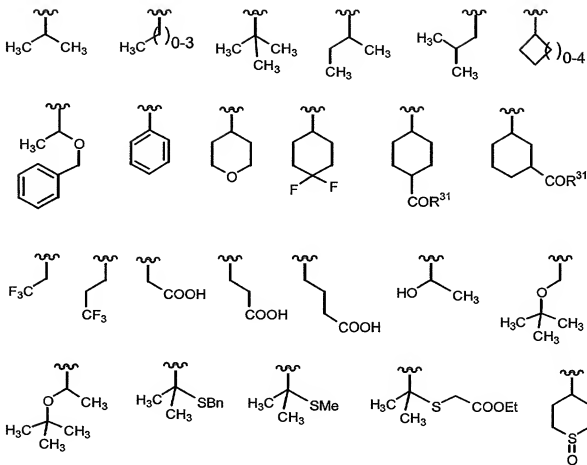
- 15 R¹ is H, halogen, cyano, nitro, CF₃, Si(alkyl)₃, straight-chain or branched lower alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkyl-alkyl, aryl, alkylaryl, arylalkyl, heteroaryl, hydroxy, alkoxy, aryloxy, alkoxycarbonyloxy, (alkylamino)carbonyloxy, mercapto, alkylthio, arylthio, alkylsulfinyl, heterocyclidylsulfinyl, arylsulfinyl, heteroarylsulfinyl, alkylsulfonyl, heterocyclidylsulfonyl, arylsulfonyl, heteroarylsulfonyl, alkylcarbonyl, arylcarbonyl, carboxy, alkoxycarbonyl, aryloxy, heteroaryloxy, alkyaminocarbonyl, arylaminocarbonyl, amino, alkylamino, arylamino, alkylsulfonamide, arylsulfonamide, alkoxycarbonbylamino, alkylureido, or arylureido;

- 20 P⁴ is H, linear or branched alkyl, arylalkyl or aryl; and
R² is H, cyano, CF₃, straight-chain or branched lower alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkyl-alkyl, aryl, alkylaryl, arylalkyl, heteroaryl, alkylsulfonyl, arylsulfonyl, carboxy, alkoxycarbonyl, aryloxy, alkyaminocarbonyl, (alkylamino)carbonyl, or arylaminocarbonyl.

2. The compound according to Claim 1, wherein R^2 is selected from the group consisting of H, alkyl, alkenyl, alkoxy carbonyl, or (allylamino) carbonyl.
3. The compound according to Claim 2, wherein R^2 is H, U is N and P^4 is H.
4. The compound according to Claim 1, wherein Ar^1 and Ar^2 are independently selected from the group consisting of phenyl, 2-thiophenyl, 2-furanyl, 3-furanyl, 3(4)-imidazolyl, 3-(1,2,4-triazolyl), 5-tetrazolyl, or 2-thiazolyl.
- 10 5. The compound according to Claim 4, wherein Ar^2 is phenyl and Ar^1 is selected from the group consisting of 3-(1,2,4-triazolyl), 5-tetrazolyl, or 2-thiazolyl and U is N and P^4 is H.
6. The compound according to Claim 1 or Claim 4, wherein R^1 is H, CF_3 , CH_3 , alkyl or alkenyl.
- 15 7. The compound according to Claim 4, wherein R^1 is H, CF_3 , CH_3 , alkyl or alkenyl.
8. The compound according to Claim 1, wherein $P^{1'}$ is either H or CH_3 .
9. The compound according to Claim 1, wherein $P^{1'}$ is H such that $P^{1'}$ and the adjacent nitrogen and carbonyl moieties correspond to the
20 residuum of a glycine unit.
10. The compound of Claim 4, wherein P^{1a} and P^{1b} are independently selected from the group consisting of the following moieties:

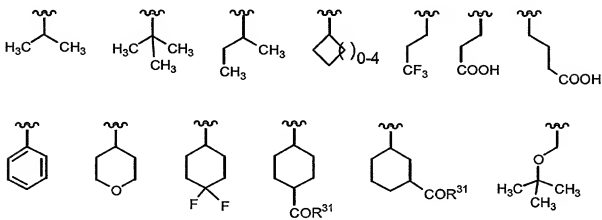


- 5 11. The compound according to Claim 4, wherein P^3 is selected from the group consisting of:



wherein $R^{31} = \text{OH}$ or O-alkyl.

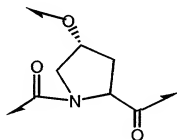
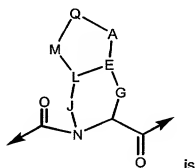
12. The compound of Claim 4, wherein P^3 is selected from the group consisting of the following moieties:



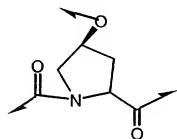
wherein $R^{31} = \text{OH}$ or O-alkyl.

13. The compound according to Claim 1, wherein P^4 is selected from the group consisting of H, tertiary butyl, isobutyl and phenyl substituents.
14. The compound according to Claim 11, where Z is NH and U is N.
15. The compound of Claim 1, wherein the moiety:

5

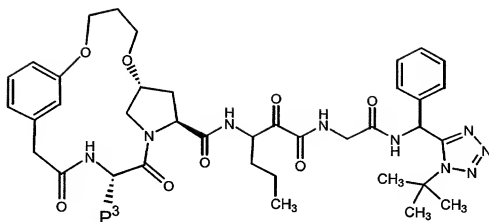


10

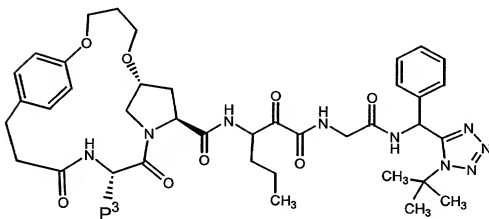


16. The compound of Claim 16, wherein Z is NH and U is N.
17. The compound according to Claim 1, wherein said compound is selected from the group consisting of compounds having the structural formulae:

15



or



wherein P^3 is an isopropyl, tertiary butyl, cyclopentyl, or cyclohexyl moiety.

18. A pharmaceutical composition comprising as an active ingredient a compound of Claim 1.

The pharmaceutical composition of Claim 18 for use in treating disorders associated with HCV.

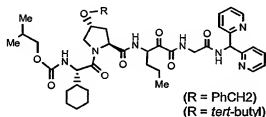
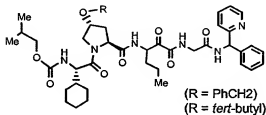
- The pharmaceutical composition of Claim 18, additionally comprising a pharmaceutically acceptable carrier.

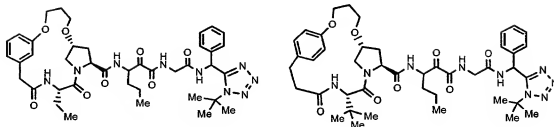
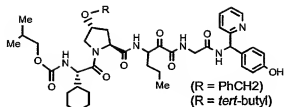
The pharmaceutical composition of Claim 20, additionally containing an antiviral agent.

The pharmaceutical composition of Claim 21, still additionally containing an interferon.

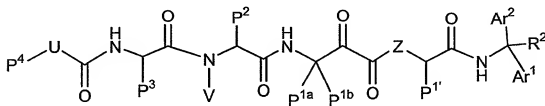
- The pharmaceutical composition of Claim 22, wherein said antiviral agent is ribavirin and said interferon is α -interferon.

24. A method of treating disorders associated with the HCV virus, said method comprising administering to a patient in need of such treatment a pharmaceutical composition which comprises therapeutically effective amounts of a compound of Claim 1.
- 5 25. The method of Claim 24, wherein said administration is subcutaneous.
26. The use of a compound of Claim 1 for the manufacture of a medicament to treat disorders associated with the HCV protease.
27. A method of preparing a pharmaceutical composition for treating
10 the disorders associated with the HCV virus, said method comprising bringing into intimate contact a compound of Claim 1 and a pharmaceutically acceptable carrier.
28. A compound exhibiting HCV protease inhibitory activity, including enantiomers, stereoisomers and tautomers of said compound, and
15 pharmaceutically acceptable salts or solvates of said compound, said compound being selected from the compounds of structures listed below:





29. A compound, including enantiomers, stereoisomers, rotomers and tautomers of said compound, and pharmaceutically acceptable salts, solvates or derivatives thereof, with said compound having the general structure shown in Formula II:



Formula II

wherein:

- 10 P^{1a}, P^{1b}, P^{1'}, P², and P³ are independently:
H, C1-C10 straight or branched chain alkyl, C2-C10 straight or branched chain alkenyl, and C3-C8 cycloalkyl, C3-C8 heterocyclic; (cycloalkyl)alkyl or (heterocycl)alkyl, wherein said cycloalkyl is made up of 3 to 8 carbon atoms, and zero to 6 oxygen, nitrogen, sulfur, or phosphorus atoms, and
- 15 said alkyl is of 1 to 6 carbon atoms;
aryl, heteroaryl, arylalkyl, or heteroarylalkyl, wherein said alkyl is of 1 to 6 carbon atoms;
wherein said alkyl, alkenyl, cycloalkyl, heterocycl; (cycloalkyl)alkyl and (heterocycl)alkyl moieties may be optionally substituted with Rⁿ, and

further wherein said P^{1a} and P^{1b} may optionally be joined to each other to form a spirocyclic or spiroheterocyclic ring, with said spirocyclic or spiroheterocyclic ring containing zero to six oxygen, nitrogen, sulfur, or phosphorus atoms, and may be additionally optionally substituted with R²;

- 5 R² is hydroxy, alkoxy, aryloxy, thio, alkylthio, arylthio, amino, alkylamino, arylamino, alkylsulfonyl, arylsulfonyl, alkylsulfonamido, arylsulfonamido, carboxy, carbalkoxy, carboxamido, alkoxycarbonylamino, alkoxycarbonyloxy, alkylureido, arylureido, halogen, cyano, or nitro moiety, with the proviso that the alkyl, alkoxy, and aryl may be additionally

- 10 optionally substituted with moieties independently selected from R³;
Z is O, NH or NR⁴;

R³ is alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkyl-alkyl, heterocyclyl, heterocyclylalkyl, aryl, alkylaryl, arylalkyl, heteroaryl, alkylheteroaryl, or heteroarylalkyl moiety, with the proviso that R³ may be additionally

- 15 optionally substituted with R⁵;

Ar¹ and Ar² are independently selected from phenyl; 2-pyridyl, 3-pyridyl, 4-pyridyl or their corresponding N-oxides; 2-thiophenyl; 3-thiophenyl; 2-furanyl; 3-furanyl; 2-pyrrolyl; 3-pyrrolyl; 2-imidazolyl; 3(4)-imidazolyl; 3-(1,2,4-triazolyl); 5-tetrazolyl; 2-thiazolyl; 4-thiazolyl; 2-oxazolyl; or 4-

- 20 oxazolyl; either or both of which may be optionally substituted with R⁶;

R¹ is H, halogen, cyano, nitro, CF₃, Si(alkyl)₃, straight-chain or branched lower alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkyl-alkyl, aryl, alkylaryl, arylalkyl, heteroaryl, hydroxy, alkoxy, aryloxy, alkoxycarbonyloxy, (alkylamino)carbonyloxy, mercapto, alkylthio, arylthio, alkylsulfinyl,

- 25 heterocyclylsulfinyl, arylsulfinyl, heteroarylsulfinyl, alkylsulfonyl, heterocyclylsulfonyl, arylsulfonyl, heteroarylsulfonyl, alkylcarbonyl, arylcarbonyl, carboxy, alkoxycarbonyl, aryloxycarbonyl, heteroaryloxycarbonyl, alkylaminocarbonyl, arylaminocarbonyl, amino, alkylamino, arylamino, alkylsulfonamide, arylsulfonamide,

- 30 alkoxycarbonbylamino, alkylureido, or arylureido;

P⁴ is H, linear or branched alkyl, arylalkyl or aryl;

R² is H, cyano, CF₃, straight-chain or branched lower alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkyl-alkyl, aryl, alkylaryl, arylalkyl, heteroaryl, alkylsulfonyl, arylsulfonyl, carboxy, alkoxycarbonyl, aryloxy carbonyl,

- 5 alkylaminocarbonyl, (allylamino)carbonyl, or arylaminocarbonyl;

U is O, NH, CH₂ or CHRⁿ; and

V is H, methyl, or lower alkyl.

30. The compound according to Claim 29, wherein R^{2'} is selected from the group consisting of H, alkyl, alkenyl, alkoxycarbonyl, and (allylamino)

- 10 carbonyl.

31. The compound according to Claim 30, wherein R^{2'} is H.

32. The compound according to Claim 31, wherein Ar¹ and Ar² are independently selected from the group consisting of phenyl, 2-thiophenyl, 2-furanyl, 3-furanyl, 3(4)-imidazolyl, 3-(1,2,4-triazolyl), 5-tetrazolyl, or 2-

- 15 thiazolyl.

33. The compound according to Claim 32, wherein Ar² is phenyl and Ar¹ is selected from the group consisting of 3-(1,2,4-triazolyl), 5-tetrazolyl, or 2-thiazolyl.

34. The compound according to Claim 29, R¹ is H, CF₃, CH₃, alkyl or alkenyl.

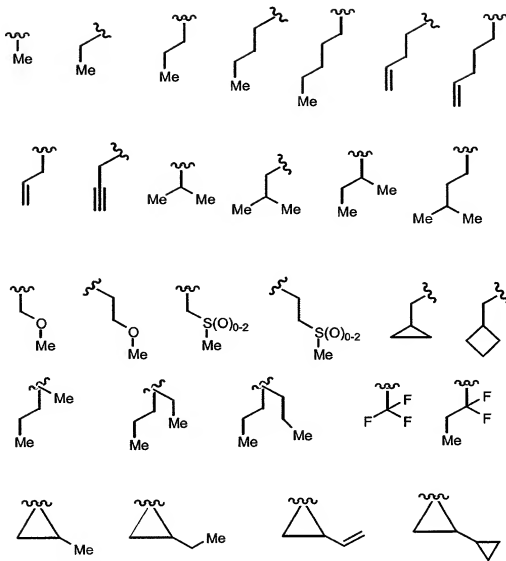
- 20

35. The compound according to Claim 29, wherein P^{1'} is selected either H or CH₃.

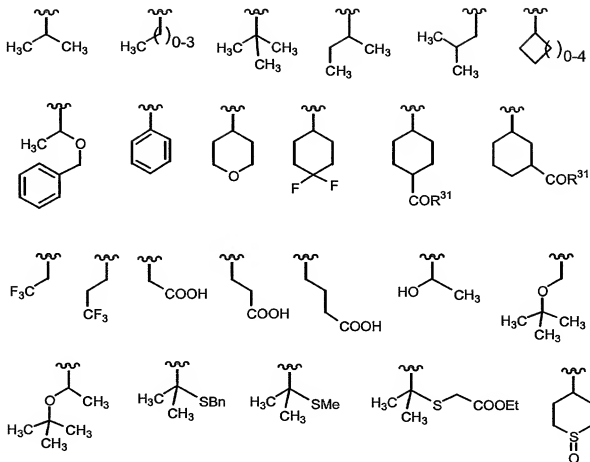
36. The compound according to Claim 29, wherein P^{1'} is H such that P^{1'} and the adjacent nitrogen and carbonyl moieties correspond to the

- 25 residuum of glycine unit.

37. The compound of Claim 29, wherein P^{1a} and P^{1b} are independently selected from the group consisting of the following moieties:

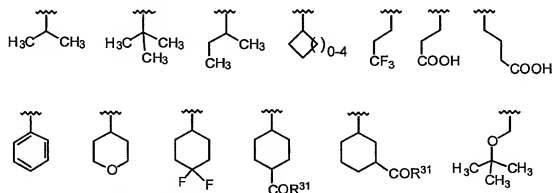


38. The compound according to Claim 29, wherein P^3 is selected from the group consisting of:



wherein R^{31} = OH or O-alkyl.

- 5 39. The compound of Claim 38, wherein R^3 is selected from the group consisting of the following moieties:



wherein R^{31} = OH or O-alkyl.

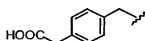
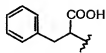
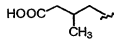
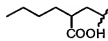
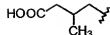
40. The compound of Claim 29, wherein U is N and P⁴ is alkyl or arylalkyl.

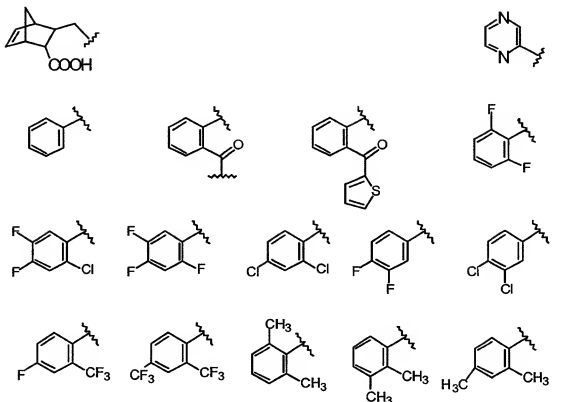
41. The compound according to Claim 29, wherein U is O or CH₂.

42. The compound according to Claim 29, wherein P⁴ is selected from

5 the following moieties:

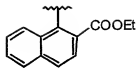
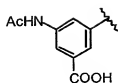






Chemical structures of various substituted benzoic acids and esters:

- 2,4-dichlorobenzoic acid
- 2,4-dichlorobenzoic acid methyl ester
- 2,4-dichlorobenzoic acid methyl ester
- 2,4-difluorobenzoic acid
- 2,3,4,5-tetrafluorobenzoic acid
- 2,3,4,5-tetrafluorobenzoic acid
- 2-methylbenzoic acid
- 2-tert-butylbenzoic acid

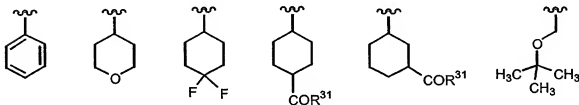
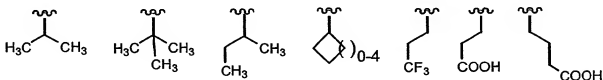


43. The compound according to Claim 42, wherein U is CH₂ and P⁴ is phenyl.

44. The compound according to Claim 42, wherein U is O and P⁴ is selected from the group consisting of methyl, tertiary butyl, isobutyl, and 2,3-dimethylpropyl.

45. The compound according to Claim 42, wherein P² and P³ are independently selected from the group consisting of: H, linear alkyl, branched alkyl, or arylalkyl, such that P² or P³ and the adjacent nitrogen and carbonyl moieties thereto correspond to the residuum of an alpha amino acid.

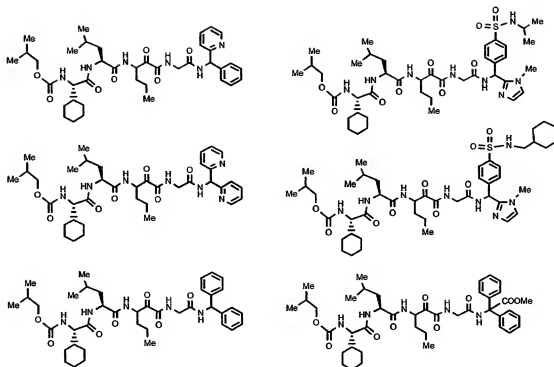
46. The compound according to Claim 45, wherein P³ is selected from the following moieties:



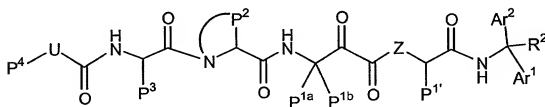
wherein R³¹ = OH or O-alkyl.

47. The compound according to Claim 46, wherein P³ is selected from the group consisting of isopropyl tertiary butyl, isobutyl, and cyclohexyl substituents.

48. The compound of Claim 45, wherein V is H.
49. A pharmaceutical composition comprising as an active ingredient a compound of Claim 29.
50. The pharmaceutical composition of Claim 49 for use in treating disorders associated with HCV.
51. The pharmaceutical composition of Claim 49 additionally comprising a pharmaceutically acceptable carrier.
52. The pharmaceutical composition of Claim 51, additionally containing an antiviral agent.
53. The pharmaceutical composition of Claim 52, still additionally containing an interferon.
54. The pharmaceutical composition of Claim 53, wherein said antiviral agent is ribavirin and said interferon is α -interferon.
55. A method of treating disorders associated with the HCV virus, said method comprising administering to a patient in need of such treatment a pharmaceutical composition which comprises therapeutically effective amounts of a compound of Claim 29.
56. The method of Claim 55, wherein said administration is subcutaneous.
57. The use of a compound of Claim 29 for the manufacture of a medicament to treat disorders associated with the HCV virus.
58. A method of preparing a pharmaceutical composition for treating the disorders associated with the HCV virus, said method comprising bringing into intimate contact a compound of Claim 29 and a pharmaceutically acceptable carrier.
59. A compound exhibiting HCV protease inhibitory activity, including enantiomers, stereoisomers and tautomers of said compound, and pharmaceutically acceptable salts or solvates of said compound, said compound being selected from the compounds of structures listed below:



60. A compound, including enantiomers, stereoisomers, rotomers and tautomers of said compound, and pharmaceutically acceptable salts, solvates or derivatives thereof, with said compound having the general structure shown in Formula III:



Formula III

wherein:

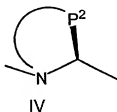
- 10 P^{1a} , P^{1b} , P^1 , P^2 , and P^3 are independently selected from:
 H, C1-C10 straight or branched chain alkyl, C2-C10 straight or branched chain alkenyl; and C3-C8 cycloalkyl, C3-C8 heterocyclic; (cycloalkyl)alkyl or (heterocyclic)alkyl, wherein said cycloalkyl is made up of 3 to 8 carbon atoms, and zero to 6 oxygen, nitrogen, sulfur, or
 15 phosphorus atoms, and said alkyl is of 1 to 6 carbon atoms;

- aryl, heteroaryl, arylalkyl, or heteroarylalkyl, wherein said alkyl is of 1 to 6 carbon atoms;
- wherein said alkyl, alkenyl, cycloalkyl, heterocyclyl; (cycloalkyl)alkyl and (heterocyclyl)alkyl moieties may be optionally substituted with R", and
- 5 further wherein said P^{1a} and P^{1b} may optionally be joined to each other to form a spirocyclic or spiroheterocyclic ring, with said spirocyclic or spiroheterocyclic ring containing zero to six oxygen, nitrogen, sulfur, or phosphorus atoms, and may be additionally optionally substituted with R";
- R" is hydroxy, alkoxy, aryloxy, thio, alkylthio, arylthio, amino, alkylamino, arylamino, alkylsulfonyl, arylsulfonyl, alkylsulfonamido, arylsulfonamido,
- 10 carboxy, carbalkoxy, carboxamido, alkoxycarbonylamino, alkoxycarbonyloxy, alkylureido, arylureido, halogen, cyano, or nitro moiety, with the proviso that the alkyl, alkoxy, and aryl may be additionally optionally substituted with moieties independently selected from R";
- 15 Z is O, NH or NR^{'''};
- R^{'''} is alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkyl-alkyl, heterocyclyl, heterocyclylalkyl, aryl, alkylaryl, arylalkyl, heteroaryl, alkylheteroaryl, or heteroarylalkyl moiety, with the proviso that R^{'''} may be additionally optionally substituted with R";
- 20 Ar¹ and Ar² are independently selected from phenyl; 2-pyridyl, 3-pyridyl, 4-pyridyl or their corresponding N-oxides; 2-thiophenyl; 3-thiophenyl; 2-furanyl; 3-furanyl; 2-pyrrolyl; 3-pyrrolyl; 2-imidazolyl; 3(4)-imidazolyl; 3-(1,2,4-triazolyl); 5-tetrazolyl; 2-thiazolyl; 4-thiazolyl; 2-oxazolyl; or 4-oxazolyl; either or both of which may be optionally substituted with R¹;
- 25 R¹ is H, halogen, cyano, nitro, CF₃, Si(alkyl)₃, straight-chain or branched lower alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkyl-alkyl, aryl, alkylaryl, arylalkyl, heteroaryl, hydroxy, alkoxy, aryloxy, alkoxycarbonyloxy, (alkylamino)carbonyloxy, mercapto, alkylthio, arylthio, alkylsulfinyl, heterocyclysulfinyl, arylsulfinyl, heteroarylsulfinyl, alkylsulfonyl,
- 30 heterocyclysulfonyl, arylsulfonyl, heteroarylsulfonyl, alkylcarbonyl,

arylcarbonyl, carboxy, alkoxy carbonyl, aryloxy carbonyl, heteroaryloxy carbonyl, alkylaminocarbonyl, arylaminocarbonyl, amino, alkylamino, arylamino, alkylsulfonamido, arylsulfonamido, alkoxy carbonylamino, alkylureido, or arylureido;

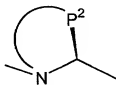
- 5 P^4 is H, linear or branched alkyl, arylalkyl or aryl;
 R^2 is H, cyano, CF_3 , straight-chain or branched lower alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkyl-alkyl, aryl, alkylaryl, arylalkyl, heteroaryl, alkylsulfonyl, arylsulfonyl, carboxy, alkoxy carbonyl, aryloxy carbonyl, alkylaminocarbonyl, (allylamino)carbonyl, or arylaminocarbonyl;
- 10 U is O, NH, CH_2 or CHR^* ;

and



- 15 where moiety IV indicates a cyclic ring structure, with the proviso that said cyclic ring structure does not contain a carbonyl group as part of the cyclic ring.

61. The compound of Claim 60, wherein said

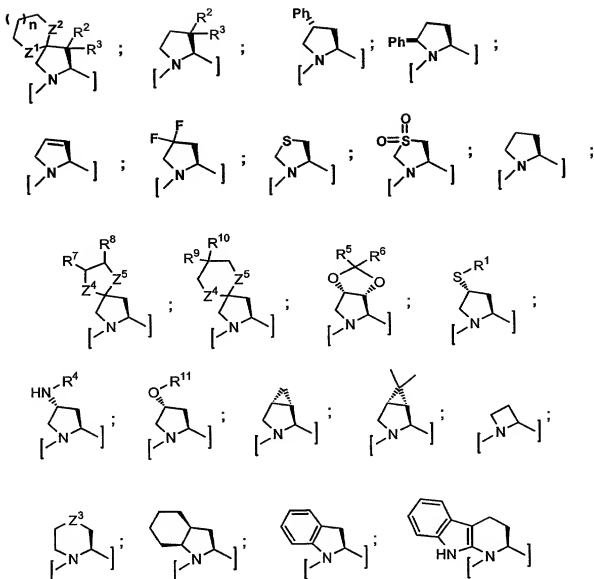


20

indicates a five-membered ring or a six-membered ring.

62. The compound of Claim 60, wherein the moiety IV forms a structural unit selected from the group consisting of:

25



wherein $n = 0, 1, 2$ or 3 ; and

5

$R^2 = R^3 = H$; $R^2 = C_1$ to C_6 straight chainalkyl or cycloalkyl; $R^3 = H$
 $R^4 = COAlkyl$ (straight chain or cyclic, Q to C_6); $COAryl$; $COOAlkyl$; $COOAryl$,
 SO_2Alkyl ; or SO_2Aryl .

$R^5 = H$; $R^6 = Alkyl$ (C_1 to C_3); $R^6 = H$; $R^5 = Alkyl$ (C_1 to C_3)

$R^7 = H$; $R^8 = Alkyl$ (C_1 to C_3), CH_2OH ; $R^8 = H$; $R^7 = Alkyl$ (C_1 to C_3), CH_2OH ;

$R^9 = R^{10} = Alkyl$ (C_1 to C_3); $R^9 = H$, $R^{10} = Alkyl$ (C_1 to C_3), $COOMe$, $COOH$,
 CH_2OH ;

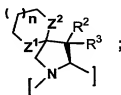
10 $R^{10} = H$, $R^9 = Alkyl$ (C_1 to C_3), $COOMe$, $COOH$, CH_2OH ;

R^{11} = Alkyl (C_1 to C_6 straight chain, branched or cyclic), CH_2Aryl (may be substituted)

X^1 = H, Alkyl (C_1 to C_4 , branched or straight chain); CH_2Aryl (substituted or unsubstituted)

- 5 $Z^1 = Z^2 = S, O$; $Z^1 = S, Z^2 = O$; $Z^1 = O, Z^2 = S$; $Z^1 = CH_2, Z^2 = O$; $Z^1 = O, Z^2 = CH_2$; $Z^1 = S, Z^2 = CH_2$; $Z^1 = CH_2, Z^2 = S$; $Z^3 = CH_2, S, SO_2, NH, NR^4$; $Z^4 = Z^5 = S, O$.

63. The compound according to Claim 62, wherein said cyclic ring
10 moiety is:



wherein Z^1 and Z^2 are S, R^2 and R^3 are H and $n=1$ or 2.

64. The compound according to Claim 63, wherein $R^{2'}$ is selected from
15 the group consisting of H, alkyl, alkenyl, alkoxycarbonyl, or (allylamino) carbonyl.

65. The compound according to Claim 64, wherein $R^{2'}$ is H.

66. The compound according to Claim 63, wherein Ar^1 and Ar^2 are
independently selected from the group consisting of phenyl, 2-thiophenyl,
2-furanyl, 3-furanyl, 3(4)-imidazolyl, 3-(1,2,4-triazolyl), 5-tetrazolyl, or 2-
20 thiazolyl.

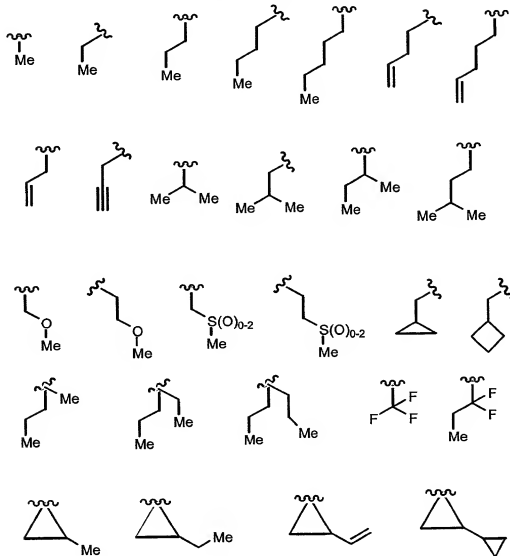
67. The compound according to Claim 66 wherein Ar^2 is phenyl and Ar^1
is selected from the group consisting of 3-(1,2,4-triazolyl), 5-tetrazolyl, or 2-
thiazolyl.

68. The compound according to Claim 63, wherein R^1 is H, CF_3 , CH_3 ,
25 alkyl or alkenyl.

69. The compound according to Claim 63, wherein $P^{1'}$ is selected from
the group consisting of H, F or CH_3 .

70. The compound according to Claim 63, wherein $P^{1'}$ is H such that $P^{1'}$
and the adjacent nitrogen and carbonyl moieties correspond to the
30 residuum of glycine unit.

71. The compound of Claim 63, wherein P^{1a} and P^{1b} is selected from the group consisting of the following moieties:

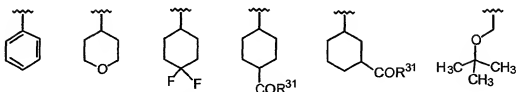


5



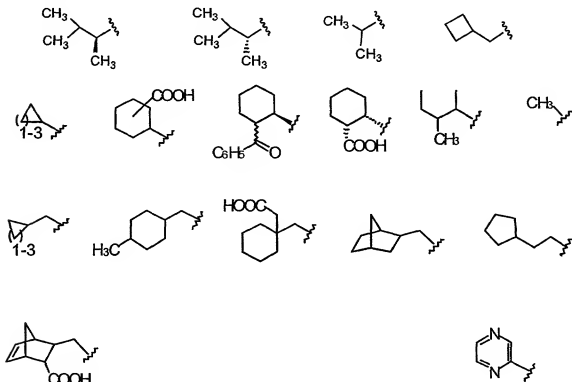
10

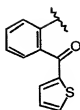
73. The compound of Claim 72, wherein R³ is selected from the group consisting of the following moieties:

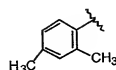
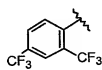
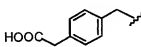
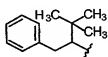
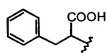
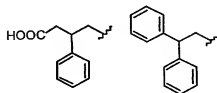
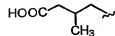
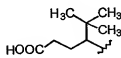
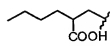
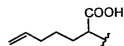
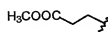
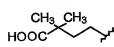
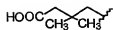
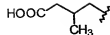


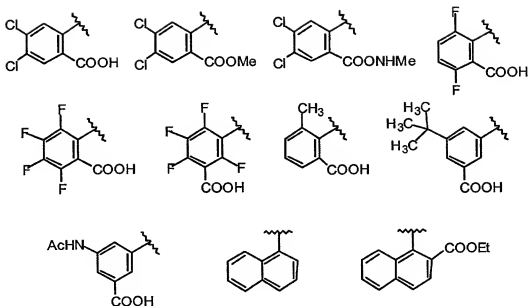
wherein $R^{31} = OH$ or O-alkyl.

74. The compound of Claim 63, wherein U is NH and P⁴ is alkyl or arylalkyl.
75. The compound according to Claim 63, wherein U is O or CH₂.
76. The compound according to Claim 63, wherein P⁴ is selected from the following moieties:









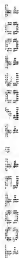
5

77. The compound according to Claim 76, wherein U is CH₂ and P⁴ is phenyl.

78. The compound according to Claim 76, wherein U is O and P⁴ is selected from the group consisting of methyl, tertiary butyl, isobutyl, and 2,3-dimethylpropyl.

79. The compound according to Claim 76 wherein P² and P³ are independently selected from the group consisting of: H, linear alkyl, branched alkyl, or arylalkyl, such that P² OR P³ and the adjacent nitrogen and carbonyl moieties thereto correspond to the residuum of an alpha amino acid.

80. The compound according to Claim 79, wherein P³ is selected from the following moieties:



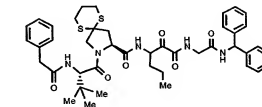
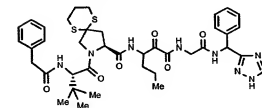
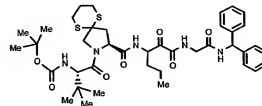
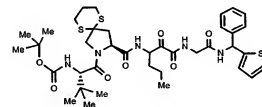
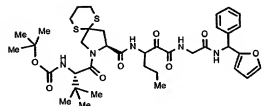
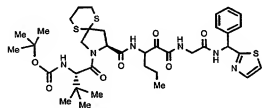
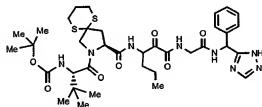
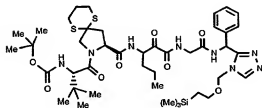
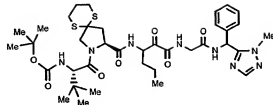
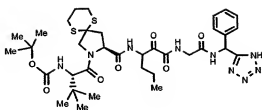
1. The first part of the paper is devoted to a review of the literature on the topic. It starts with a general overview of the field, followed by a more detailed discussion of the specific issues at hand. The author then presents his own findings, which are based on a series of experiments. Finally, he concludes with some thoughts on the implications of his work.

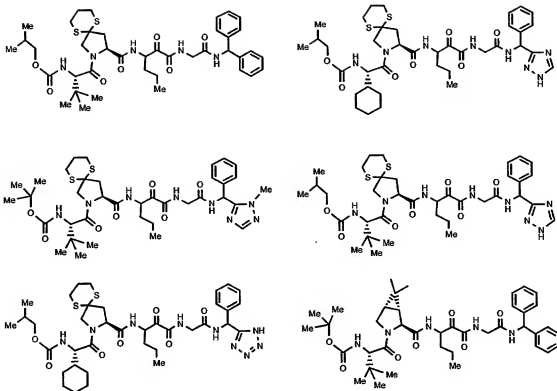
1. The first part of the paper is devoted to a review of the literature on the topic. It starts with a general overview of the field, followed by a more detailed discussion of the specific issues at hand. The author then presents his own findings, which are based on a series of experiments. Finally, he concludes with some thoughts on the implications of his work.

91. A method of preparing a pharmaceutical composition for treating the disorders associated with the HCV virus, said method comprising

92. A compound exhibiting HCV protease inhibitory activity, including enantiomers, stereoisomers and tautomers of said compound, and pharmaceutically acceptable salts or solvates of said compound, said

93. The compound according to Claim 60, wherein said compound is selected from the group consisting of:





94. A pharmaceutical composition for treating disorders associated with the HCV virus, said composition comprising therapeutically effective amount of one or more compounds in Claim 93 and a pharmaceutically acceptable carrier.